



CORDELL BANK, GULF OF THE FARALLONES AND MONTEREY BAY  
NATIONAL MARINE SANCTUARIES

## **JOINT MANAGEMENT PLAN REVIEW**

### **ECOSYSTEM MONITORING – Meeting Summary**

April 17, 2003

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#### *OVERVIEW*

On Thursday, April 17, 2003, the ecosystem monitoring working group for the California joint management plan review met for their initial meeting. This was the first of three scheduled full-day meetings to identify strategies and develop an action plan for improving ecosystem monitoring activities and coordination among the three central and northern CA sanctuaries. Discussions during the first meeting focused on explaining working group purpose and procedures; reaching agreement on issue definition, goals and objectives; and identifying a preliminary list of outcomes to develop into strategies. All of these objectives were accomplished, and participants also identified additional expertise and information resources to facilitate discussions during the next meeting.

#### *JOINT MANAGEMENT PLAN REVIEW*

The meeting began with a brief overview of the joint management plan review (JMPR) and the purpose of working groups and cross-cutting working groups. These discussions were abbreviated because all of the members present had previous involvement with the JMPR process. Discussions focused on the unique character and constraints of cross-cutting working groups. All of the working groups in the JMPR process are structured to address issues identified during scoping. The cross-cutting groups (e.g., ecosystem monitoring, maritime heritage, community outreach, boundaries, and administration) are structured around common issues where coordination among the three sanctuaries is likely to improve resource management across the entire area. Such issues are relatively broad in nature and are likely to overlap more specific issues that are being addressed by site-focused working groups. As such, cross-cutting groups must be aware that other groups will potentially put forth recommendations that will have implications for the cross-cutting action plan.

#### *WORKING GROUP PROCEDURES*

Group members also reviewed the documents outlining the group's structure, mechanics, and responsibilities and were provided with guidance for self-governance. All of these materials are generally consistent with working procedure set forth for all of the JMPR working groups. In view of scheduling limitations between group meetings, this group will adhere, whenever possible, to 7 days advance notice for preparatory materials for meetings (e.g., draft agenda, background documents).

Although the group does not anticipate addressing many contentious areas, we recognized the need for consensus and for clear and consistent recommendations in view of the reporting requirements. Cross-cutting groups will be presenting recommendations separately to three sanctuary advisory councils (SACs). As such, recommendations put forth without consensus would be subject to individual interpretation by each of the SACs, which is not consistent with

the purpose of a cross-cutting action plan. As a partial solution, Julie Barrow introduced to the group procedures for reaching consensus adopted by other cross-cutting groups. These procedures will be distributed to the group for review.

Participants also reviewed criteria for evaluating and prioritizing strategies and actions. These were presented with a simple scoring system (i.e., 1 through 3 with higher score representing greater priority). The criteria and scoring system were generally acceptable and considered useful to establish priority. A seventh criteria also was recommended to evaluate the extent to which the solution is within the sanctuaries realm of control (e.g., is this something sanctuary management actions can effect?) In depth discussion of the remaining criteria was deferred until later in the overall working group process. Should the need arise to employ the criteria, the group will reevaluate the list and determine ranking factors to weight criteria appropriately.

#### *ISSUE DEFINITION*

Conservation science in the National Marine Sanctuary Program is typically divided into the major activity areas of characterization, monitoring, and research. Characterization includes actions to describe the environment by assessing resources and establishing baseline conditions. Monitoring consists of repeated observations to establish status and trends. Research is limited to mechanistic studies, including process research, prediction, and modeling. The distinctions among these three activities areas were recognized to be primarily programmatic constructs. In practice, these areas are not clearly delineated. However, it was agreed that monitoring for the purpose of this working group should primarily focus on activities to establish status and trends. As an operational definition for ecosystem, the working group decided to focus attention on the area within the boundaries of the three contiguous sanctuaries and adjacent areas that directly influence sanctuary waters.

#### *OBJECTIVE*

Discussions regarding the objective of the ecosystem monitoring centered on programmatic requirements and the inherent scientific benefit of long-term observations. The legislation establishing the National Marine Sanctuary System requires that long-term monitoring of sanctuary resources be supported, promoted, and coordinated. The system is also expected to evaluate the effectiveness of its management actions. Monitoring for both purpose can also provide unexpected benefits because repeated and continued measurements frequently prove valuable to assess unanticipated considerations. In general, efforts for ecosystem monitoring should facilitate collection, distribution, and use of data to evaluate ecosystem condition (i.e., status) relative to a defined regional or historic baseline to establish long-term trends and/or variation among management regimes.

#### *GOALS*

The three sanctuaries in the joint management plan review are the only ones in the system with contiguous boundaries, and their combine area protects a significant portion of the California coastal waters. Although each sanctuary was designated as a distinct management entity, the established boundaries are primarily political constructs. The separations between these managed areas do not represent ecological transition. The cross-cutting process provides a unique opportunity to establish coordinated monitoring activities at a scale that is more appropriate ecologically. The utility of the resulting data will be expand from the local to the

regional scale, with the potential for influencing resource management actions throughout a substantial portion of the West Coast. Such coordination will be beneficial for resources common to the sanctuaries and will have particular value for assessing large-scale processes and migratory species, where data from a single sanctuary could be spatially insufficient and potentially misleading.

All three sanctuaries collect some of their own monitoring data. However, most of the monitoring data that informs sanctuary management is not financed, collected, or analyzed by the sanctuaries. Instead, sanctuaries support and promote these activities indirectly by issuing required sanctuary permits; providing vessel time, staff support, or equipment; and/or coordinating the interests and information of outside agencies and partners. Thus coordination of ecosystem monitoring efforts across the three sanctuaries will require strategic action at various programmatic levels. Strategies should focus on identifying and coordinating monitoring activities among the three sanctuaries and establishing cooperative and joint programs for administrative activities to support monitoring.

*PRELIMINARY STRATEGIES—GOAL: COORDINATION OF MONITORING ACTIVITIES*

Participant identified three categories of monitoring activity for coordination: 1) current activities common to 2 or more sanctuaries; 2) activities currently limited to 1 or 2 sanctuaries that should be expanded to the other sanctuaries; and 3) common monitoring needs that would be beneficial to the 2 or more sanctuaries.

To evaluate whether any of these activities needs to be coordinated, expanded, or implemented requires an understanding of the monitoring needs and priorities of the sanctuaries. Thus, the three categories of monitoring can be addressed at various stages in a comprehensive effort to identify monitoring needs, gaps, and priorities for all three sanctuaries. This process requires time and effort beyond the scope of this working group. However, the group recommended this activity as a key strategy for monitoring coordination across the sanctuaries.

Immediate target areas for specific monitoring coordination were also identified based on the knowledge and experience in the group.

*Current common monitoring activities known by working group*

- Beach-cast birds and mammals.
- Birds/mammals/krill
- NMS rocky intertidal programs
- NEMO
- CalCOFI/ACCEO
- NMFS juvenile rockfish surveys
- Snowy plovers (Point Reyes Bird Observatory)
- Seabird colony studies (Point Reyes Bird Observatory)
- Common murre restoration (future collaboration with USFWS)
- Northern elephant seals
- NMFS marine mammal aerial surveys
- PISCO
- IOOS

The group chose three of these activities as priorities for developing specific strategies for coordination (i.e., beach-cast birds and mammals, birds/mammals/krill, rocky intertidal). Selection was based on the level of direct sanctuary involvement and consequently the ability of a strategy to produce positive results. The others on the list will be assessed for coordination and expansion during the comprehensive process to identify monitoring needs, gaps, and priorities (i.e., Strategy 5).

Other potential areas for coordination are likely to arise from common monitoring strategies recommended by other concurrent working groups involved in the management plan review process. The group recognized the need to review these strategies prior to the completion of the draft management plans. If time allows and information is available it may be possible to review such strategies prior to finalizing our own recommendations. Otherwise, we recognized the need for a strategy to set forth a process or activity to review other working groups recommendations for common monitoring activities.

#### Goal I: Coordination of monitoring activities

##### Strategy 1: Coordinate beach-cast birds and mammals monitoring activities

- Activity: Beachcombers and walkers can have a joint workshop.
- Activity: Resurrect what was done by the SPO.
- Activity: Improve comparability of data and data sharing.
- Activity: Establish shared reporting.

##### Strategy 2: Coordinate birds/mammals/krill monitoring activities

- Activity: Review the MMSB workshop proceedings for selected implementation.
- Activity: Improve comparability of data and data sharing.
- Activity: Establish shared reporting.
- Activity: Coordinate use of NOAA shiptime.

##### Strategy 3: Coordinate rocky intertidal monitoring activities.

- Activity: Rocky intertidal have a workshop.
- Activity: Improve comparability of data and data sharing.
- Activity: Establish shared reporting.

##### Strategy 4: Review monitoring recommendations from other working groups for potential opportunities to develop and incorporate into this X-cutting action plan.

##### Strategy 5: Identify and evaluate potential areas for future coordination from a review of all monitoring activities common to 2 or 3 sanctuaries.

- Activity: Review monitoring programs that were not targeted for specific action.
- Activity: Look at existing programs to see what they are monitoring.
- Activity: Prioritize the activities and existing programs.
- Activity: Identify what other things needs to be monitored through SWiM using a review of SIMoN materials.
- Activity: Determine important management issues.
- Activity: Select important species.

*PRELIMINARY STRATEGIES—GOAL: COORDINATION OF MONITORING ADMINISTRATION*

Successful coordination of ecosystem monitoring across the three sanctuaries also will require ongoing communication and interaction to conduct planning, identify new opportunities, and resolve impediments. Thus, the development of a new administrative infrastructure to promote monitoring coordination was recommended as a strategy. Participants also identified a number of targeted administrative areas for coordination. These strategies will be recommended to the administrative cross-cutting team, which will determine how to proceed on developing strategies. The ecosystem working group will address the strategies that are referred back for our consideration.

Goal II: Coordination of monitoring administration.

Strategy 1: Coordinate requests for NOAA shiptime.

Activity: Submit for joint ship time on Mac.

Strategy 2: Coordinate equipment use, ownership, maintenance, and technical support.

Activity: Create a list of equipment.

Activity: Have a schedule of use on-line.

Strategy 3: Coordinate data collection.

Strategy 4: Coordinate volunteer training.

Strategy 5: Coordinate and simplify permitting process and interaction with headquarters.

Strategy 6: Data management/access/availability.

Strategy 7: Institute joint reporting for both public and technical audiences.

Strategy 8: Establish shared staffing (e.g., technical support, volunteer coordination).

Strategy 9: Establish an administrative infrastructure to promote identification of new opportunities for coordinated monitoring action.

Activity: Institute coordination meetings for the research coordinators to discuss coordination of monitoring activities (e.g., annual operating plans, monitoring plans and opportunities, requests for proposals).

Activity: Establish research advisory panels (RAPs) and institute annual joint session to encourage interaction.

*ACTION ITEMS*

- Review contact list and send corrections to Kimberly.
- Distribute procedures for reaching consensus to group for review.
- Investigate availability of Channel Islands National Marine Sanctuary's draft monitoring action plan.
- Distribute System-wide Monitoring Framework document.
- Distribute Sanctuary Integrated Monitoring Network 2000 Workshop Report.
- Enlist the participation of a physical oceanographer (e.g., MERHAB representative)
- Revise Issue Description

*NEXT STEPS*

2<sup>nd</sup> Meeting: May 7, 2003

Location: Half Moon Bay Lodge  
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*WORKING GROUP MEMBERS/ATTENDEES*

Julie Barrow, National Marine Sanctuary Program  
Ben Becker, National Park Service (absent)  
Kimberly Benson, National Marine Sanctuary Program  
Lydia Bergen, University of California, Santa Cruz  
Mark Carr, University of California, Santa Cruz  
Don Croll, University of California, Santa Cruz (absent)  
Andrew DeVogelaere, Monterey Bay National Marine Sanctuary  
Gwen Heistand, Sanctuary Advisory Council for Gulf of the Farallones  
Carol Keiper, Sanctuary Advisory Council for Cordell Bank (absent)  
Steve Lonhart, Monterey Bay National Marine Sanctuary  
Shannon Lyday, Farallones Marine Sanctuary Association  
Steven Morgan, University of California, Davis (absent)  
Paul Orlando, National Marine Sanctuary Program  
Dale Roberts, Cordell Bank National Marine Sanctuary  
Jan Roletto, Gulf of the Farallones National Marine Sanctuary  
Bill Sydeman, Point Reyes Bird Observatory